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Radii of convexity and close-to-convexity of certain integral representations

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Abstract

Strict upper bounds are determined for |s(z)|, |Re s(z)|, and |Im s(z) | in the class of functions s(z)=anzn+an+1zn+1+... (n1) regular in |z|<1 and satisfying the condition |u (θ1) -u (θ2) |≤K| θ1-θ2|, where U(θ)=Re s (eiθ), K>0, and θ1 and θ2 are arbitrary real numbers. These bounds are used in the determination of radii of convexity and close-to-convexity of certain integral representations. © 1970 Consultants Bureau.

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